



Figure similar

MLFB-Ordering data

1FK7084-2AC71-1PB0

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data	
Rated speed (100 K)	2000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	15.0 Nm	Shaft height	80
Rated current	6.7 A	Cooling	Natural cooling
Static torque (60 K)	16.60 Nm	Radial runout tolerance	0.050 mm
Static torque (100 K)	20.0 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	6.90 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	8.50 A	Vibration severity grade	Grade A
Moment of inertia	35.500 kgcm <sup>2</sup>	Connector size	1
Efficiency	93.0 %	Degree of protection	IP64
<b>Physical constants</b>		Design acc. to Code I	IM B5 (IM V1, IM V3)
		Temperature monitoring	Pt1000 temperature sensor
Torque constant	2.36 Nm/A	Electrical connectors	Connectors for signals and power rotatable
Voltage constant at 20° C	152.0 V/1000*min <sup>-1</sup>	Color of the housing	Standard (Anthracite RAL 7016)
Winding resistance at 20° C	0.58 Ω	Holding brake	with holding brake
Rotating field inductance	12.0 mH	Shaft extension	Feather key
Electrical time constant	20.50 ms	Encoder system	Resolver R14DQ: resolver 14 bits (resolution 16384, internal 2-pole)
Mechanical time constant	1.02 ms		
Thermal time constant	55 min		
Shaft torsional stiffness	68000 Nm/rad		
Net weight of the motor	21.3 kg		



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### Optimum operating point

Optimum speed 2000 rpm

Optimum power 3.1 kW

### Limiting data

Max. permissible speed (mech.) 6000 rpm

Max. permissible speed (inverter) 3800 rpm

Maximum torque 61.0 Nm

Maximum current 28.5 A

### Holding brake

Holding brake version Permanent-magnet brake

Holding torque 22.0 Nm

Power supply voltage DC 24 V  $\pm$  10 %

Coil current 0.9 A

Opening time 200 ms

Closing time 60 ms

Highest braking work 1400 J

### Recommended Motor Module

Rated inverter current 9 A

Maximum inverter current 27 A

Maximum torque 58.40 Nm